

REMARKS

Claims 2-4, 6-8, and 10-12 are pending in the application.

Claims 2, 4, 6, 8, 10, 12 are finally rejected under 35 U.S.C. § 102(e) as being anticipated by Oshikiri et al. (Oshikiri). Claims 3, 7 and 11 are rejected under 35 U.S.C. 103 over Oshikiri in view of Taguchi.

It should be noted that each of applicant's independent claims 2, 6 and 10 recites the distinguishing feature of judging whether an interval on a frequency axis between the LSP coefficients is equal to or less than a prescribed threshold value.

One of the features of the claimed invention determines whether the voice signal is a vowel or a consonant. The determining is performed by checking an interval on a frequency axis between the LSP coefficients.

Accordingly, an interval between the LSP coefficients is an interval on a frequency axis, and this interval is different from an Euclidean distance.

The Office Action asserts that the applicant argues that the claimed invention uses an interval between the LSP coefficients, although the references use the Euclidean distance.

The reference Oshikiri describes a background noise/speech classification method where decisions are based on calculated frame power and a calculated LSP coefficient. As pointed out Oshikiri only describes a Euclidian distance between LSP coefficients for noise/speech classification.

However, the distinctive feature in the applicant's claims is judging whether the voice signal is a vowel or a consonant by checking an interval on a frequency axis between the LSP coefficients.

The Oshikiri et al. reference describes the spectral fluctuation amount calculator and the fluctuation amount is defined as a Euclidian distance between LSP coefficients according to equation 4, whereas the applicant's invention is based on whether an interval between LSP coefficients are closely located on the frequency axis with respect to a threshold value.

Thus it is respectfully submitted that applicant's interval between the LSP coefficients is an interval on a frequency axis, and such interval is totally different from the Euclidean distance of the references. This patentably distinguishable feature of the present invention is set forth in independent claims 2, 6 and 12. It is respectfully requested the rejection of the pending claims be withdrawn and the pending claims be allowed. Dependent claims 4, 8, 10 are likewise in condition for allowance for at least the reasons set forth above and because they each recite additional limitations.

Claims 3, 7, 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Oshikiri et al. in view of Taguchi. Claims 3, 7, 11 are dependable upon claims 2, 6 and 10 respectively and are also in condition for allowance for the reasons set forth above and because they include additional limitations. It should be emphasized that Taguchi does not teach the features which could not be found in the Oshikiri disclosure.

Further, Taguchi teaches "the spectral distance calculation carried out simply according to the expression (2) is not satisfactory as a matching measure and deteriorates the quality of the synthesized voice." (col. 3, lines 27-30).

However, according to the present invention, a voice signal is judged according to an interval between the LSP coefficients where the interval is on a frequency axis. In contrast, according to Oshikiri, an Euclidean distance between LSP coefficients is used for noise/speech

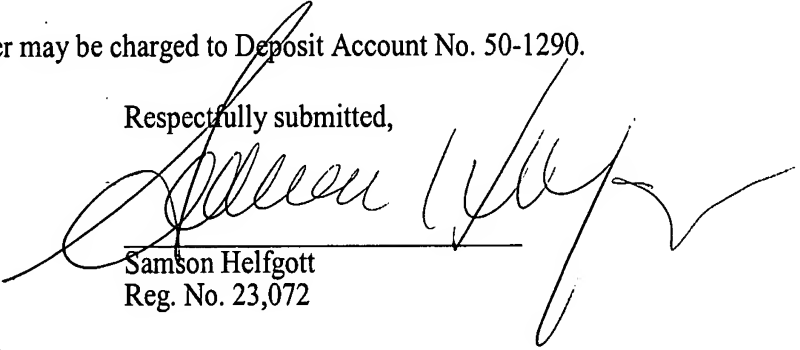
classification. Oshikiri fails to suggest that a voice signal is judged to be of a vowel when a corresponding LSP coefficient interval is narrow.

It is respectfully submitted that one skilled in the art would not arrive at the present invention from the combination of Oshikiri et al. with Taguchi.

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,



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